



# **THE FUTURE OF NASA @ THE KENNEDY SPACE CENTER**

Mark Wiese  
Chief, Flight Projects Support  
Launch Services Program  
Kennedy Space Center

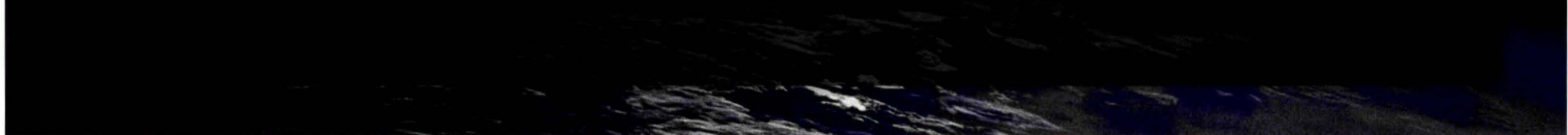
# KSC IS PREPARING FOR THE FUTURE

## Vision

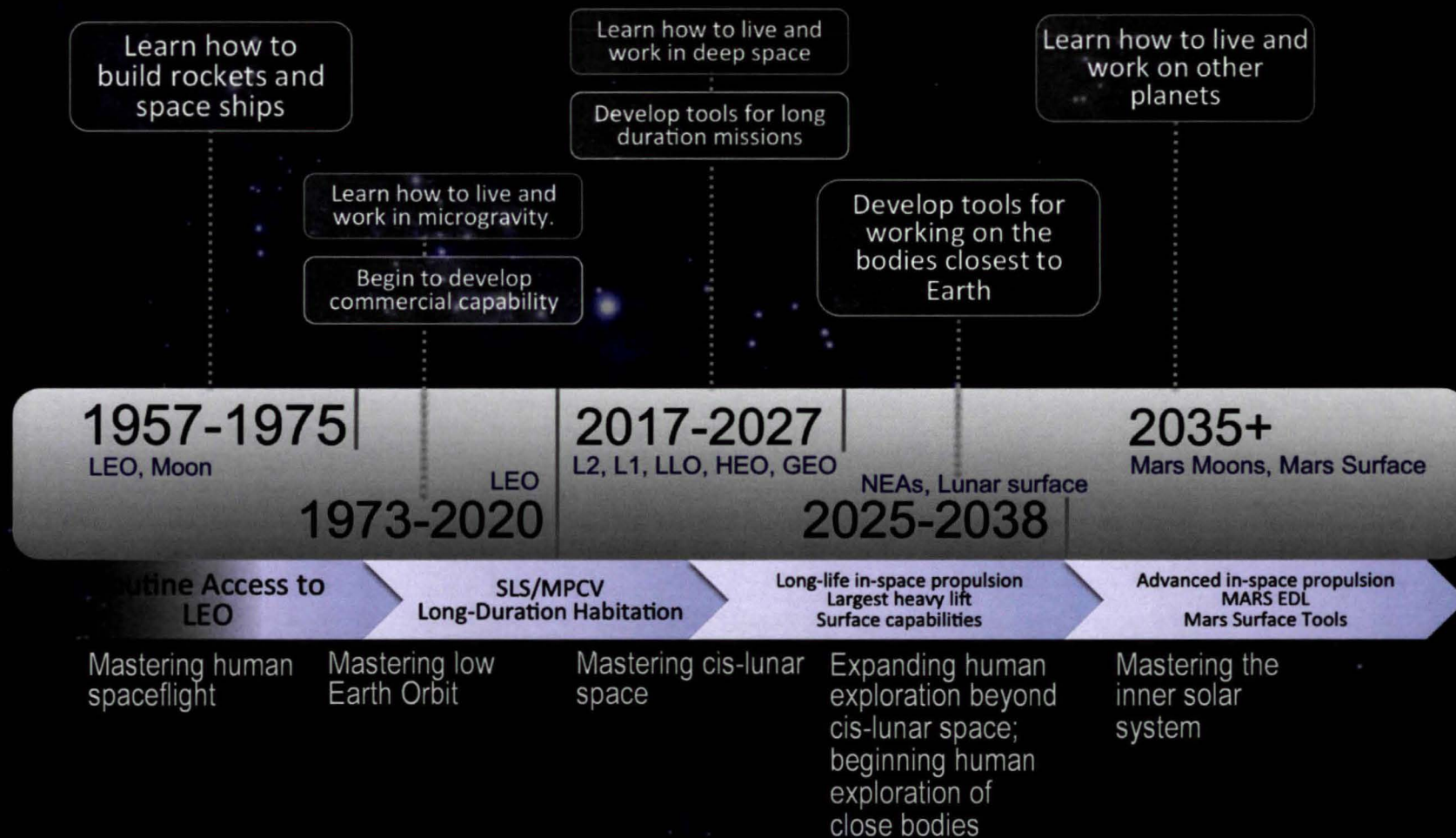
KSC is the world's preeminent launch complex for Government and commercial space access, enabling the world to explore and work in space

## Mission

KSC safely manages, develops, integrates, and sustains space systems through partnerships that enable innovative, diverse access to space and inspires the Nation's future explorers



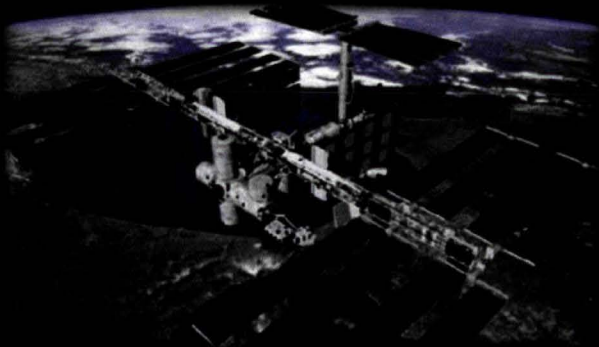
# THE STORY OF HUMAN SPACE EXPLORATION



We are part of a larger, long-term exploration of space.



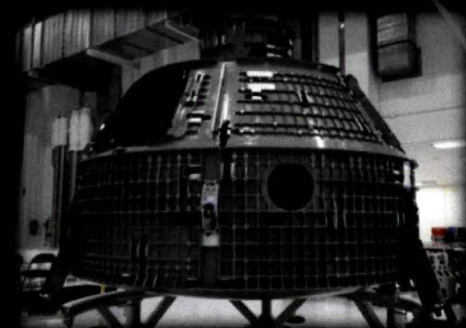
International Space  
Station



Launch Services



Exploration



Commercialization



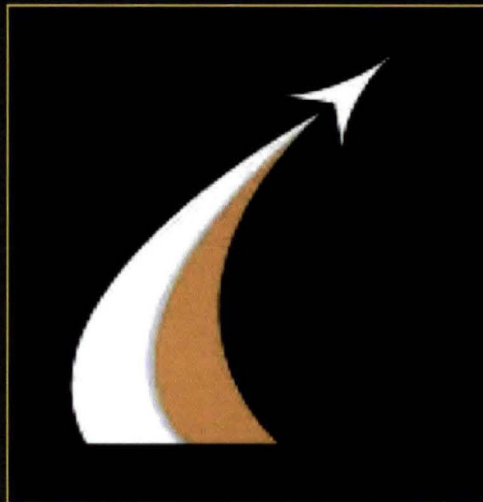
AME CREW

NEW RIDE

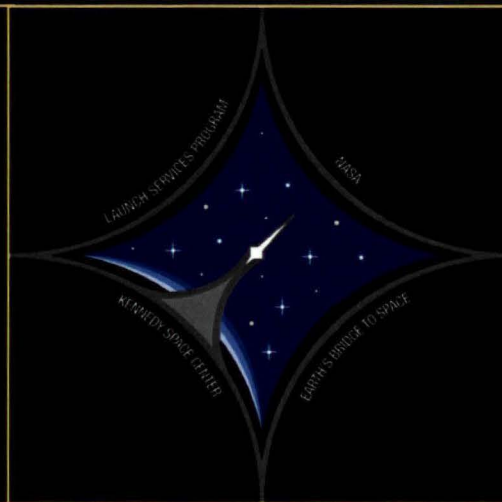
COMMERCIAL CREW



# KSC PROGRAMS



**Ground Systems  
Development and  
Operations Program**

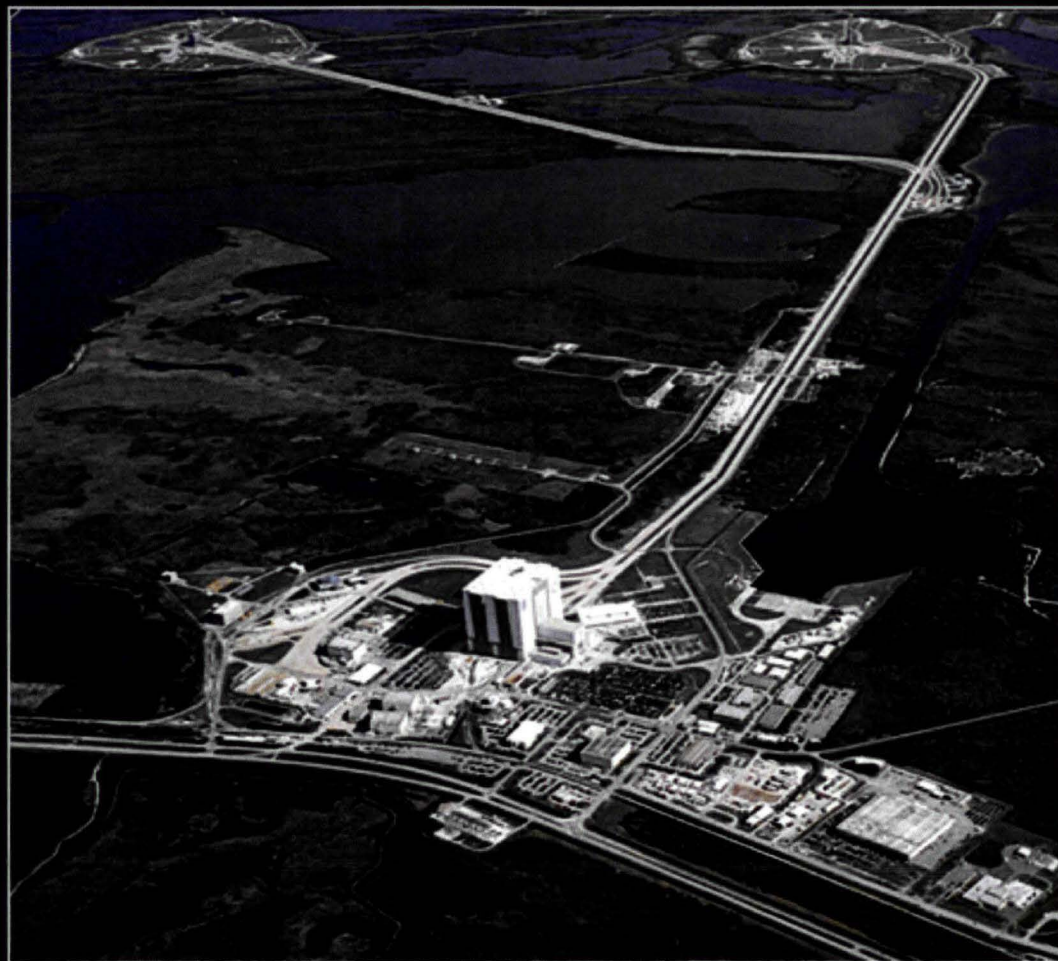


**Launch Services  
Program**



**Commercial  
Crew Program**

# GROUND SYSTEMS DEVELOPMENT AND OPERATIONS (GSDO) PROGRAM



**Vehicle  
Integration  
and Launch**

**Ground  
Processing**

**Command and  
Control**



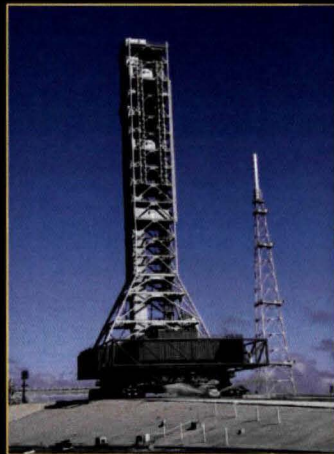
# GSDO OBJECTIVES



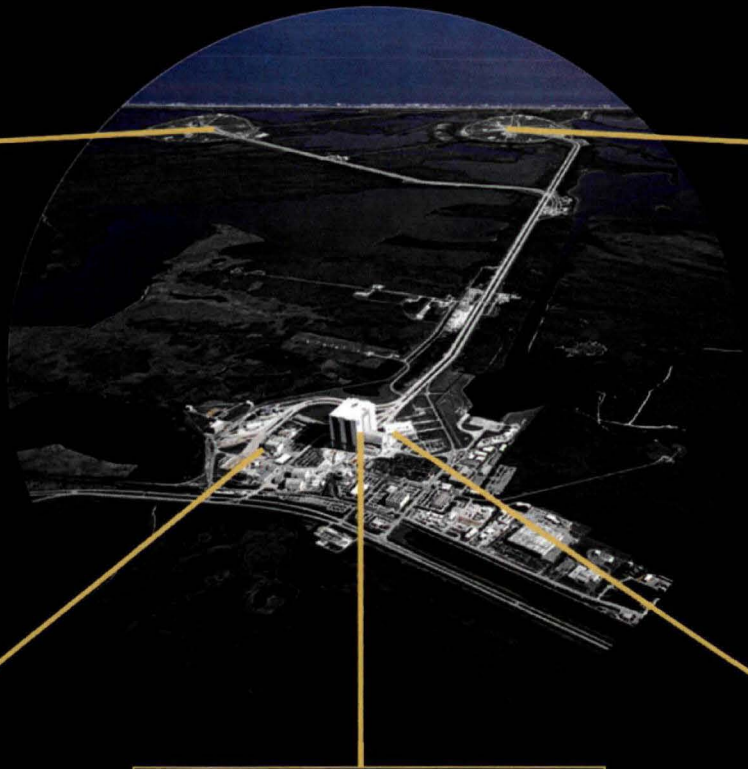
Clean pad concept



Shuttle pad configuration



Mobile Launcher and transport

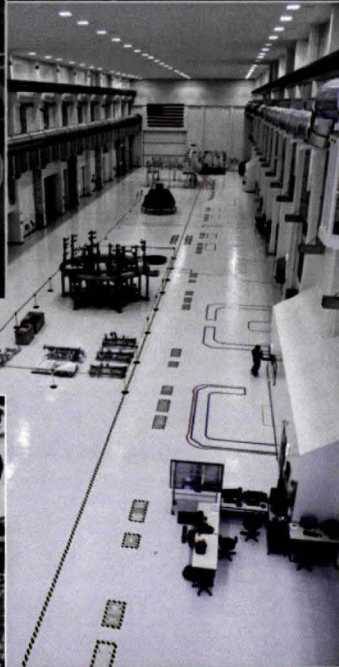
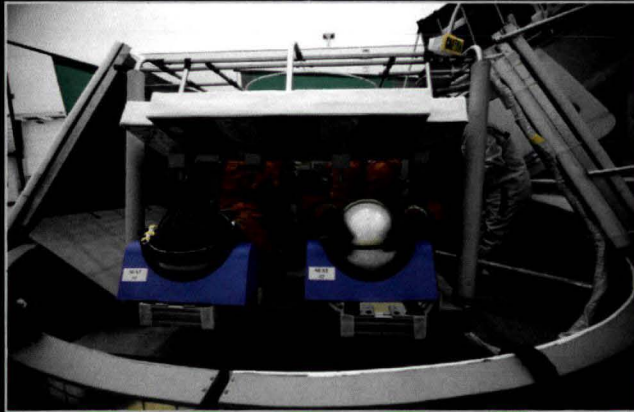


Multi-use integration

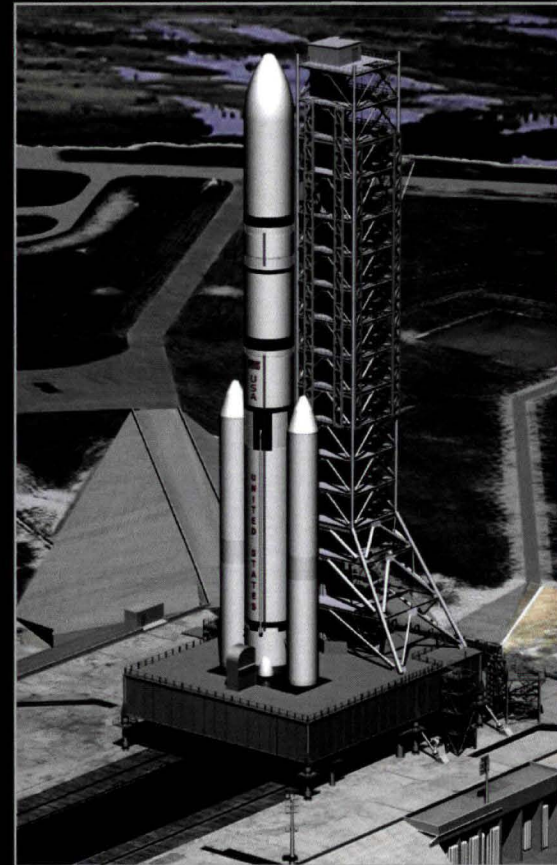


Communication,  
command, and control

# HUMAN SPACEFLIGHT



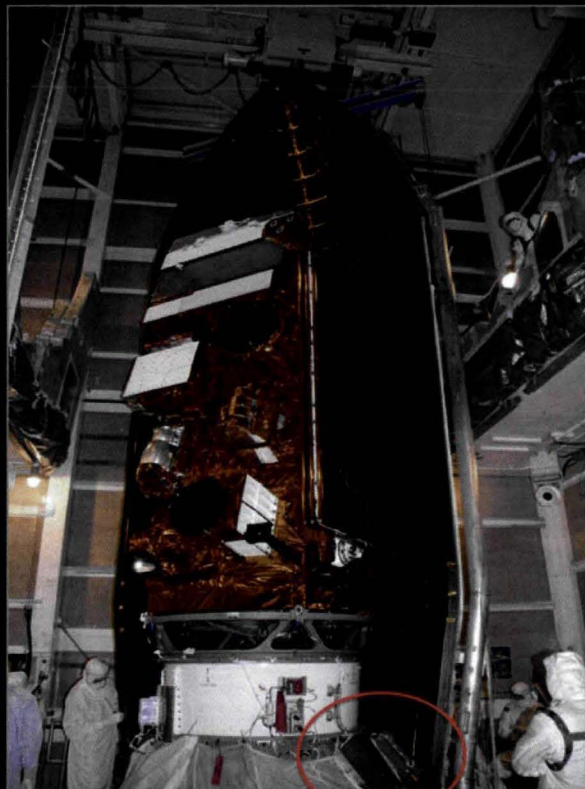
**Orion Multi-Purpose  
Crew Vehicle**



**Space Launch  
System (SLS)  
Heavy-lift Booster**



# LAUNCH SERVICES PROGRAM (LSP)



Launch Broker

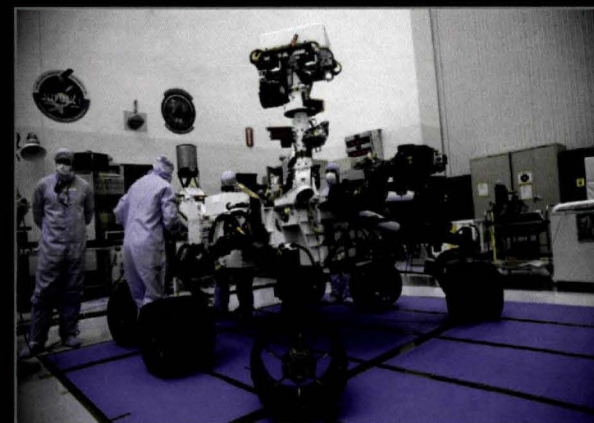
Acquisition and  
Program Management

Flight Design  
and Trajectory

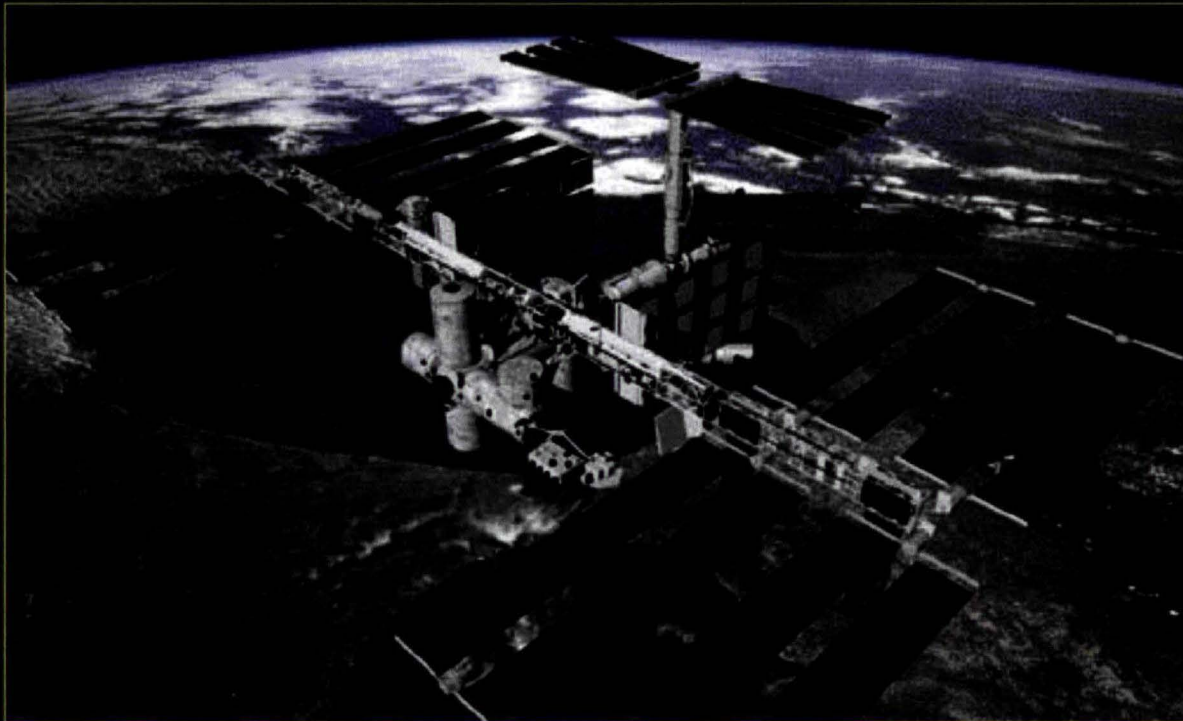
CubeSat  
Launch Initiative



**Mars Science Laboratory (MSL)**  
*Launched November 26, 2011*  
*Arrived on Mars on August 5, 2012*



# COMMERCIAL CREW PROGRAM (CCP)



**Facilitate  
access to  
Station**

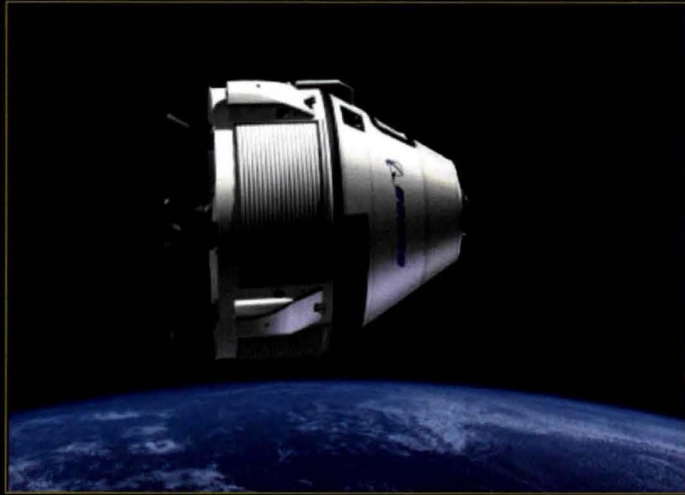
**Drive private  
sector  
innovation**

**Reduce  
reliance on  
foreign  
systems**

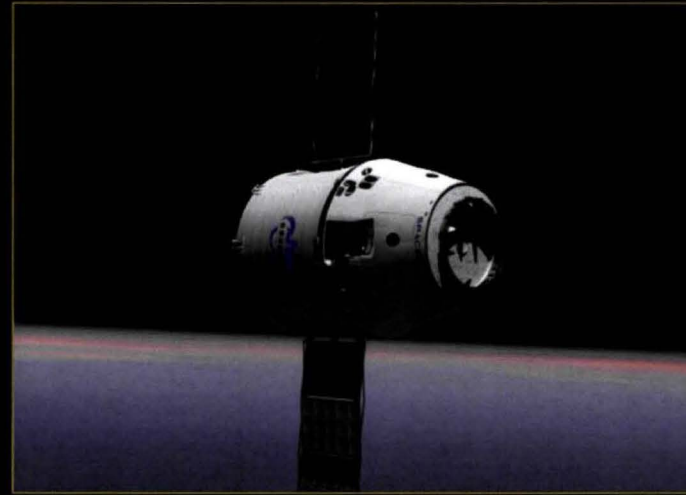
# CCP CURRENT PARTNERS



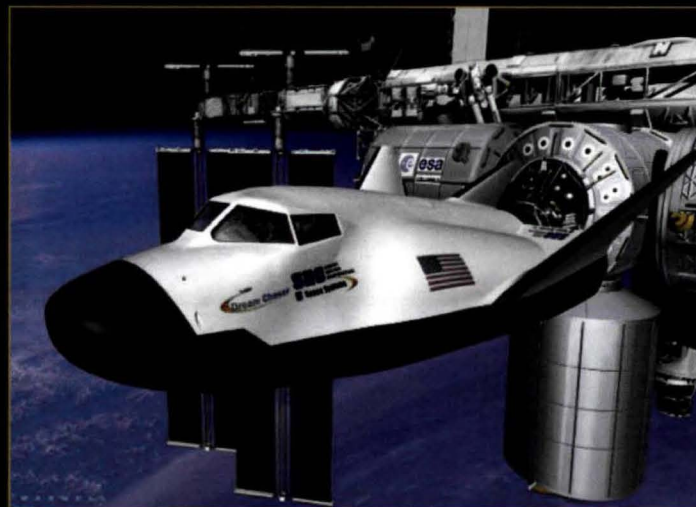
## Commercial Crew Integrated Capability (CCiCAP)



Boeing



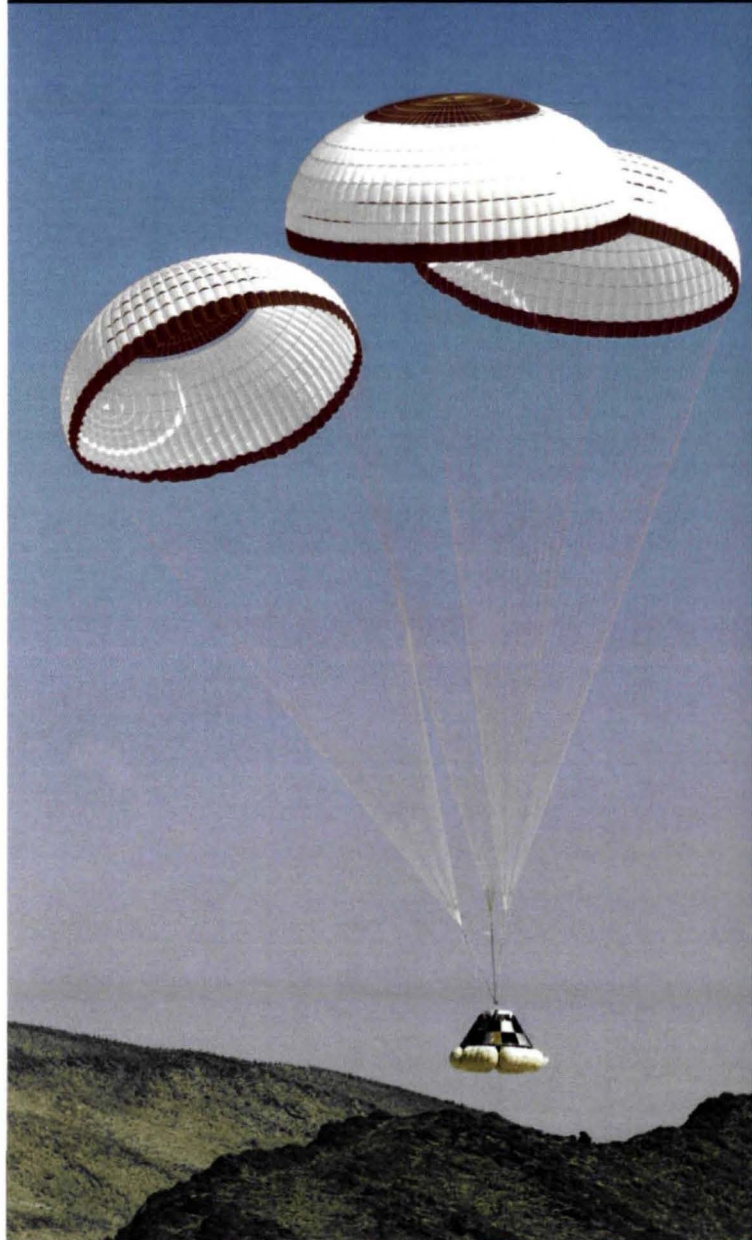
SpaceX



Sierra Nevada



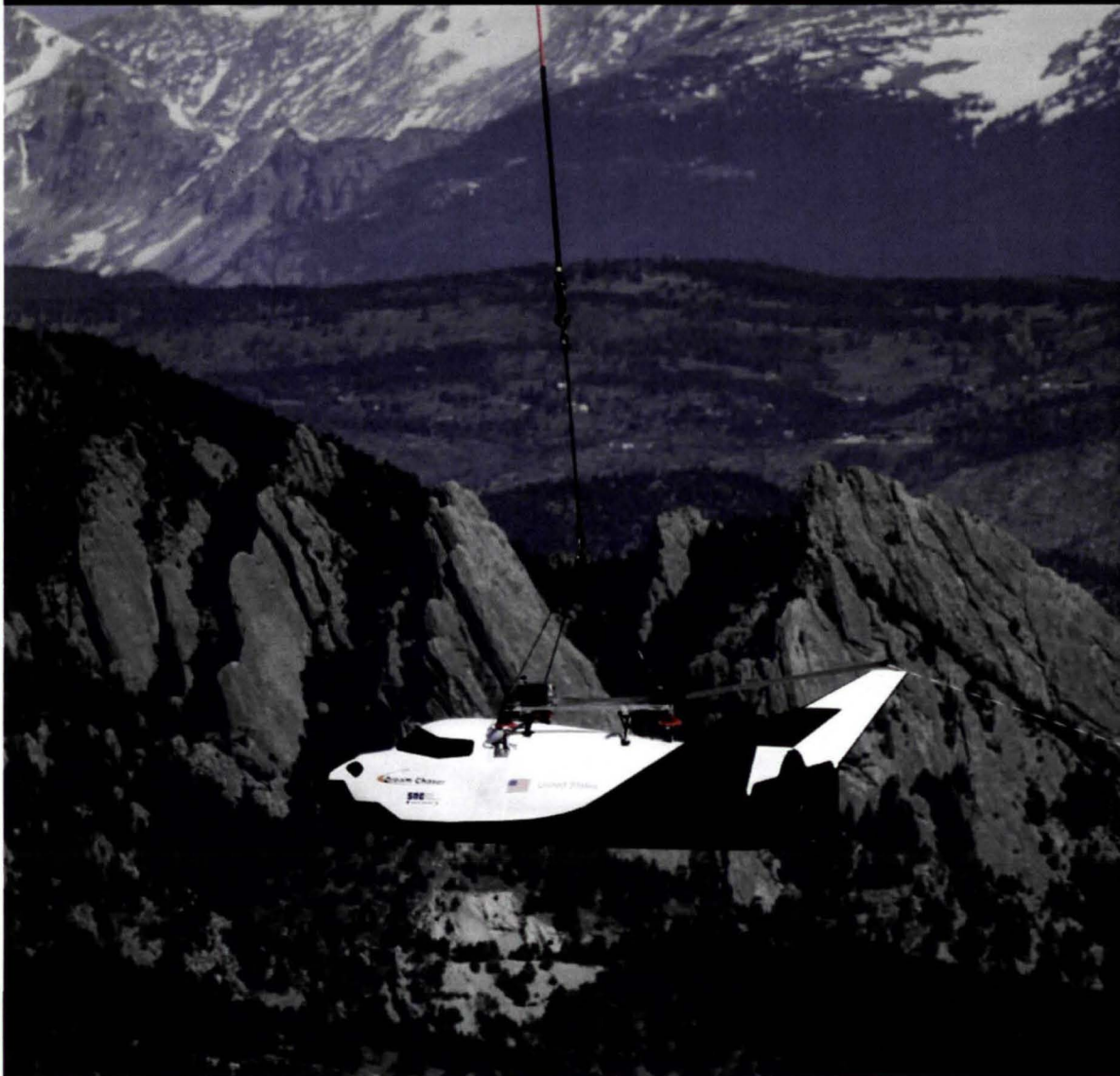
# BOEING



**May 2012**

The Boeing Company's CST-100 crew capsule floated to a smooth landing beneath three main parachutes in Nevada, testing the entire landing system of the spacecraft. This was the second parachute test that Boeing performed under its partnership with NASA's Commercial Crew Program.

# SIERRA NEVADA



**May 2012**

Sierra Nevada successfully completed a "captive-carry test" of its full-scale Dream Chaser orbital crew vehicle in preparation for a free-flight approach and landing test in coming months.



# SPACEX



## May 2012

Dragon's journey to the space station was SpaceX's second demonstration mission under NASA's Commercial Orbital Transportation Services Program.

Following a series of tests of its maneuverability and abort systems, the capsule was grappled and berthed to the space station by Expedition 31 crew members.

For the Commercial Crew Program, the company hosted crew accommodation trials of its Dragon capsule with NASA astronauts to check out the critical interior systems of the spacecraft.







# PARTNERSHIP OPPORTUNITIES

Center Planning and Development Office (CPDO)



**“Front Door” to engage new business focusing on:**

- Master plan for KSC infrastructure, land use, and real estate strategies
- Commercial space transportation and services
- Retention of skilled aerospace workers and facility assets

**[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)**

# SUCCESSFUL PARTNERSHIPS



- Orbiter Processing Facility 3 agreement
- 15 year use permit agreement
- Operations / maintenance savings of \$9.1 million
- Space Florida agreement to lease OPF-3 to Boeing



**[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)**

# PARTNERING AVAILABILITY



Launch Complex 39 Area



Exploration Park



Landing Complex



Industrial Complex

[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)



# ECONOMIC IMPACT



- President's FY 2013 proposed budget request for KSC:

***\$2.1 billion***

- KSC FY 2013 civil servant workforce:

***2,049***

- KSC Contracts and Grants Obligated in FY 2011:

***\$1.5 billion***

